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09/641,021	08/17/2000	Alan B. Cayton	59428-P001US-10020580	4559
20053 7590 03/24/2008 PULBRIGHT & JAWORSKI L.L.P 2200 ROSS AVENUE SUITE 2800 DALLAS, TX 75201-2784			EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

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1	UNITED STATES PATENT AND TRADEMARK OFFICE
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4	BEFORE THE BOARD OF PATENT APPEALS
5	AND INTERFERENCES
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8	Ex parte ALAN B. CAYTON, J. BRANDT HAMBY, and
9	J. KEVIN LEONARD
10	
11	
12	Appeal 2007-4176
13	Application 09/641,021
14	Technology Center 3600
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16	
17	B :111M 124 2000
18	Decided: March 24, 2008
19 20	
21	Before WILLIAM F. PATE, III, HUBERT C. LORIN, and
22	ANTON W. FETTING, Administrative Patent Judges.
	,
23	FETTING, Administrative Patent Judge.
	DEGIGION ON A DDEAT
24	DECISION ON APPEAL
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25	STATEMENT OF CASE
26	Alan B. Cayton, J. Brandt Hamby, and J. Kevin Leonard (Appellants)
27	seek review under 35 U.S.C. § 134 of a final rejection of claims 1-92, the
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28	only claims pending in the application on appeal.

1 We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b) (2002).

We REVERSE 4

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5 The Appellants invented a software product that enables employers to generate a customized application program executable to interact with job 6 candidates and to determine the qualified candidates for a position with the 7 8 employer. The employer enters desired hiring criteria, and the software product then generates a customized application program that applies the 9 desired hiring criteria to determine the qualified candidates for the employer 10 (Specification 7:8-16). An understanding of the invention can be derived 11 from a reading of exemplary claim 1, which is reproduced in the Analysis 12 13 section below.

This appeal arises from the Examiner's final Rejection, mailed January 19, 2006. The Appellants filed an Appeal Brief in support of the appeal on May 2, 2006. An Examiner's Answer to the Appeal Brief was mailed on April 18, 2007. A Reply Brief was filed on August 15, 2006. 17

PRIOR ART

The Examiner relies upon the following prior art: 19

> US 6,618,734 B1 Sep. 9, 2003 Williams Smith US 6,701,313 B1 Mar. 2, 2004

REJECTIONS

Claims 1-2, 6-26, 28-34, and 36-44, 46-76, and 78-87 stand rejected under 35 U.S.C. § 102(e) as anticipated by Williams.

- Claims 3-5, 35, and 88-92 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Williams and Smith.
- 3 Claims 27, 45, and 77 stand rejected under 35 U.S.C. § 103(a) as

5 ISSUES

unpatentable over Williams.

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- 6 The issues pertinent to this appeal are
- Whether the Appellants have sustained their burden of showing that
 the Examiner erred in rejecting claims 1-2, 6-26, 28-34, and 36-44,
 46-76, and 78-87 under 35 U.S.C. § 102(e) as anticipated by
 Williams.
- Whether the Appellants have sustained their burden of showing that
 the Examiner erred in rejecting claims 3-5, 35, and 88-92 under 35
 U.S.C. § 103(a) as unpatentable over Williams and Smith.
 - Whether the Appellants have sustained their burden of showing that the Examiner erred in rejecting claims 27, 45, and 77 under 35 U.S.C. § 103(a) as unpatentable over Williams.
- The pertinent issue turns on whether Williams describes one software program that can generate another software program based on specification data entered.

FACTS PERTINENT TO THE ISSUES

The following enumerated Findings of Fact (FF) are supported by a preponderance of the evidence.

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Facts Related to Appellants' Disclosure

- 01. FIGURE 4 shows an exemplary flow diagram for the operational flow of an application generator for generating one or more customized application programs for qualifying candidates according to an employer's hiring criteria (Specification 9: Fig. 4).
- 22. The disclosure contains no lexicographic definition of "application generator."
- 03. The ordinary and customary meaning of "application generator" is software that generates application programs from descriptions of the problem rather than by traditional programming. It is at a higher level and easier to use than a high-level programming language such as C/C++ or COBOL. One statement or descriptive line may generate a huge routine or an entire program. Generators used for complex program development allow if-then-else programming to be expressed along with the simpler descriptive of the inputs and required outputs.¹

Williams

04. Williams is directed to an automated interview and data collection system using job-related questions to objectively measure a job candidates work ethic, adaptability, teamwork, customer-service orientation, dependability, and other traits. It

¹PC Magazine On-Line Encyclopedia http://www.pcmag.com/encyclopedia_term/0,2542,t=application+generator &i=37909,00.asp

provides instantaneous automated evaluation of candidate qualifications through interview questions customized for the client's or employer's needs. The system captures all necessary and desired employment data of a prospective employee, and is accessible daily by the client/employer for evaluation according to that client/employer criteria (Williams 2:19-40).

- 05. Williams uses a profiling process in which background information regarding a position, such as tasks performed and work environment, is obtained and entered into the system. The information is then analyzed to determine ideal characteristics for a position, including skills, abilities, and behavioral traits (Williams 3:30-38).
- 06. Williams describes a second tier of automated interview questions that allow the system to determine which applicants best match the criteria set by the client (Williams 3:2-5). This interview is entered into the system (Williams 3:62-64).
- 07. Once preliminary background information regarding the applicant is collected and the system determines that the applicant qualifies to advance to the substantive stages of the interview process, Williams' system administers a Bona Fide Occupational Qualifier ("BFOQ") interview. Upon completion of the BFOQ interview, candidates who satisfy the criteria set by the client for this stage will proceed to the Behavioral Assessment Interview, in which the candidate responds to customized and validated assessment questions. The applicant's responses and response

times are monitored to determine alternate directions in which the interview may proceed. Those who "best" match the criteria set by the client for this stage are advised that they pre-qualify for a follow-up interview and are given instructions regarding the follow-up interview (Williams 5:48-67).

Smith

- 08. Smith is directed to a method of data object generation and matching and addresses the problem of matching coincidental needs relating to an activity or entity by the provision of a classification system specific to the particular activity or entity to be traded or exchanged which allows parties to the trade to define their requirements in a standardized format (Smith 2:48-57).
- 09. Smith stores predefined classification categories containing predefined user-selectable attributes; displays the classification categories to a user for selection of one or more attributes; stores the selected attributes in the form of a data object of a second type; and compares and matches the stored attributes of the data object of the second type with the stored pre-selected attributes of a data object of the first type (Smith 2:58 3:11)

Facts Related To Differences Between The Claimed Subject Matter And The Prior Art

 Neither Williams nor Smith describe a program that generates another application program based on data entered, that is, an application generator.

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Facts Related To The Level Of Skill In The Art

- of ordinary skill in the pertinent art of application generation. We will therefore consider the cited prior art as representative of the level of ordinary skill in the art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) ("[T]he absence of specific findings on the level of skill in the art does not give rise to reversible error 'where the prior art itself reflects an appropriate level and a need for testimony is not shown'") (quoting *Litton Indus. Prods., Inc. v. Solid State Sys. Corp.*, 755 F.2d 158, 163 (Fed. Cir. 1985).
 - 12. One of ordinary skill in the software programming arts at the time of the invention knew that software programs that accepted data describing specifications for another program and then generated another application program were known as application generators.

Facts Related To Secondary Considerations

 There is no evidence on record of secondary considerations of non-obviousness for our consideration.

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PRINCIPLES OF LAW

Claim Construction

During examination of a patent application, pending claims are given their broadest reasonable construction consistent with the

- specification. *In re Prater*, 415 F.2d 1393, 1404-05 (CCPA 1969);
- In re Am. Acad. of Sci. Tech Ctr., 367 F.3d 1359, 1369, (Fed. Cir.
- 3 2004).
- 4 Limitations appearing in the specification but not recited in the claim are
- 5 not read into the claim. E-Pass Techs., Inc. v. 3Com Corp., 343 F.3d 1364,
- 6 1369 (Fed. Cir. 2003) (claims must be interpreted "in view of the
- specification" without importing limitations from the specification into the
- 8 claims unnecessarily)
- Although a patent applicant is entitled to be his or her own lexicographer
- of patent claim terms, in ex parte prosecution it must be within limits. In re
- 11 *Corr*, 347 F.2d 578, 580 (CCPA 1965). The applicant must do so by placing
- such definitions in the Specification with sufficient clarity to provide a
- person of ordinary skill in the art with clear and precise notice of the
- meaning that is to be construed. See also In re Paulsen, 30 F.3d 1475, 1480
- 15 (Fed. Cir. 1994) (although an inventor is free to define the specific terms
- used to describe the invention, this must be done with reasonable clarity,
- deliberateness, and precision; where an inventor chooses to give terms
- uncommon meanings, the inventor must set out any uncommon definition in
- some manner within the patent disclosure so as to give one of ordinary skill
- in the art notice of the change).
- 21 Anticipation
- "A claim is anticipated only if each and every element as set forth in the
- 23 claim is found, either expressly or inherently described, in a single prior art
- ²⁴ reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628,

- 1 631 (Fed. Cir. 1987). "When a claim covers several structures or
- 2 compositions, either generically or as alternatives, the claim is deemed
- 3 anticipated if any of the structures or compositions within the scope of the
- 4 claim is known in the prior art." *Brown v. 3M*, 265 F.3d 1349, 1351 (Fed.
- 5 Cir. 2001). "The identical invention must be shown in as complete detail as
- 6 is contained in the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d
- 7 1226, 1236 (Fed. Cir. 1989). The elements must be arranged as required by
- 8 the claim, but this is not an ipsissimis verbis test, i.e., identity of terminology
- 9 is not required. *In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990).
- 10 Obviousness
- A claimed invention is unpatentable if the differences between it and
- the prior art are "such that the subject matter as a whole would have been
- 13 obvious at the time the invention was made to a person having ordinary skill
- 14 in the art." 35
- 15 U.S.C. § 103(a) (2000); KSR Int'l v. Teleflex Inc., 127 S.Ct. 1727 (2007);
- 16 Graham v. John Deere Co., 383 U.S. 1, 13-14 (1966).
- In *Graham*, the Court held that the obviousness analysis is
- bottomed on several basic factual inquiries: "[(1)] the scope and content of
- the prior art are to be determined; [(2)] differences between the prior art and
- the claims at issue are to be ascertained; and [(3)] the level of ordinary skill
- in the pertinent art resolved." 383 U.S. at 17. See also KSR Int'l v. Teleflex
- 22 Inc., 127 S.Ct. at 1734. "The combination of familiar elements according to
- 23 known methods is likely to be obvious when it does no more than yield
- 24 predictable results." KSR, at 1739.

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"When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability." *Id.* at 1740.

"For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill." *Id.*

"Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." *Id.* at 1742.

Automation of a Known Process

13 It is generally obvious to automate a known manual procedure or mechanical device. Our reviewing court stated in Leapfrog Enterprises Inc. 14 v. Fisher-Price Inc., 485 F.3d 1157 (Fed. Cir. 2007) that one of ordinary 15 16 skill in the art would have found it obvious to combine an old electromechanical device with electronic circuitry "to update it using 17 18 modern electronic components in order to gain the commonly understood benefits of such adaptation, such as decreased size, increased reliability, 19 simplified operation, and reduced cost. . . . The combination is thus the 20 adaptation of an old idea or invention . . . using newer technology that is 21 commonly available and understood in the art." Id at 1163. 22

1	ANALYSIS
2	Claims 1-2, 6-26, 28-34, and 36-44, 46-76, and 78-87 rejected under 35
3	U.S.C. § 102(e) as anticipated by Williams.
4	The Appellants argue these claims as a group.
5	Accordingly, we select claim 1 as representative of the group.
6	37 C.F.R. § 41.37(c)(1)(vii) (2007).
7	The Examiner found that Williams described all of the limitations of
8	claim 1 which is reproduced below [bracketed matter, including citations to
9	where the Examiner found support, and some paragraphing added] (Answer
10	3-4:¶ 3).
11 12	 A method for qualifying candidates for employment with an employer, said method comprising:
13	[1] executing a computer program,
14 15 16	said computer program receiving as input from said employer a desired hiring criteria of said employer; [Williams 3:30-64]
17	[2] based on said desired hiring criteria of said employer,
18 19	said computer program generating at least one customized application program
20 21	that is executable to interact with candidates for employment with said employer and
22 23 24	determine whether each of said candidates is qualified for employment with said employer; [Williams 3:2-5 and 62- 64]
25 26	[3] allowing said candidates access to the at least one generated customized application program; and [Williams 5:48-67]
27 28	[4] responsive to input from each of said candidates to the at least one generated customized application program,

1 said at least one generated customized application program automatically determining whether each of said 2 candidates qualifies for a position of employment with 3 the employer. [Williams 5:53-67] 4 The Appellants contend that Williams does not describe having one 5 program generate the application program as in claim 1 (Br. 16-19) and that 6 7 Williams is unavailable as prior art because the Appellants conceived of the invention prior to the date of Williams' filing and diligently reduced to 8 9 practice after the date of Williams' filing (Br. 10-16). We agree that Williams does not describe having one program generate 10 the application program as in claim 1. 11 First, we find that whether Williams describes the remaining limitations 12 of claim 1 is not under contention, and that the Examiner was correct in 13 14 finding that Williams did describe those limitations (FF 04, 05, 06, & 07). 15 We next examine all of the citations the Examiner relied on to support the finding that Williams described on program generating another program. 16 All of those cited portions describe a program that provides an interactive 17 18 interview, but none describe how that program is generated (FF 06). The 19 Examiner responded that Williams also describes generating a customized employment program at Williams 8:11-15 and Figs. 5-6 (Answer 20:¶ 9). 20 This portion refers to Williams' Behavioral Assessment Interview. While 21 this interview is also interactive, again Williams does not describe how it is 22 generated. We have examined the entirety of Williams and cannot find any 23 24 description or even suggestion that Williams uses one program that accepts specification inputs to create another application program (FF 10). 25

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1 The clearest indication the Examiner provides as to how Williams might describe this limitation is in referring once again to Williams' col. 3 in which questions are entered into the system. The Examiner concludes that 3 the system then generates, and places quotation marks around the word 4 "generates" as if to suggest a more subtle interpretation, the finished 5 program (Answer 21: Top ¶). Thus, it would appear the Examiner is 6 suggesting that the generation occurs either through conventional 7 compilation of a source program, or through the changes in a program's state 8 9 brought about by entry of data.

Neither of these constructions would meet the limitations of claim 1. 10 11 First we find that one of ordinary skill knew that programs, such as that in claim 1, that accepted data describing specifications for another program and 12 then generated another application program were known as application 13 14 generators (FF 12). We further find that this is consistent with the 15 Appellants' Specification, which describes using an application generator to perform the step of generating an application program (FF Error! 16 Reference source not found.), and the usual meaning of an application 17 generator (FF 01 & 03). 18

A conventional compiler program does generate an executable program from source code, but does not accept specification data to generate an application program. Entering data within an existing program does change its internal state, and therefore might be considered to have changed the program, but it does not generate a new program. Thus neither construction implied by the Examiner would meet the limitations of claim 1.

1 Since this issue is dispositive, the Appellants' arguments regarding whether Williams is available as prior art are moot. All of the remaining independent claims have a similar limitation of one program accepting 3 specification inputs and generating another application program, and all of 4 5 the dependent claims incorporate this limitation by virtue of their dependence. 6 The Appellants have sustained their burden of showing that the 7 Examiner erred in rejecting claims 1-2, 6-26, 28-34, and 36-44, 46-76, and 8 78-87 under 35 U.S.C. § 102(e) as anticipated by Williams. 9 Claims 3-5, 35, and 88-92 rejected under 35 U.S.C. § 103(a) as 10 11 unpatentable over Williams and Smith. Claims 3-5, 35, and 88-92 depend from claims 1, 30, 54, and 62 and 12 therefore contain the same limitations of one program generating another 13 program. Williams does not suggest having one program generate another 14 program (FF 10), as we found supra. Smith does describe generating 15 16 software objects within a program, but does not suggest one program 17 generating another program (FF 08, 09, & 10). The Appellants have sustained their burden of showing that the Examiner erred in rejecting claims 18 3-5, 35, and 88-92 under 35 U.S.C. § 103(a) as unpatentable over Williams 19 and Smith. 20 21 Claims 27, 45, and 77 rejected under 35 U.S.C. § 103(a) as unpatentable over Williams. 22 Claims 27, 45, and 77 depend from claims 1, 30, and 62 and therefore 23 contain the same limitations of one program generating another program. 24

1 Williams does not suggest having one program generate another program (FF 10), as we found supra. The Appellants have sustained their burden of 2 showing that the Examiner erred in rejecting claims 27, 45, and 77 under 35 3 4 U.S.C. § 103(a) as unpatentable over Williams. CONCLUSIONS OF LAW 5 The Appellants have sustained their burden of showing that the 6 Examiner erred in rejecting claims 1-2, 6-26, 28-34, and 36-44, 46-76, and 7 8 78-87 under 35 U.S.C. § 102(e) as anticipated by, and claims 3-5, 27, 35, 45, 77, and 88-92 under 35 U.S.C. § 103(a) as unpatentable over the prior art. 9 10 DECISION To summarize, our decision is as follows: 11 • The rejection of claims 1-2, 6-26, 28-34, and 36-44, 46-76, and 78-87 12 under 35 U.S.C. § 102(e) as anticipated by Williams is not sustained. 13 • The rejection of claims 3-5, 35, and 88-92 under 35 U.S.C. § 103(a) as 14 unpatentable over Williams and Smith is not sustained. 15 • The rejection of claims 27, 45, and 77 under 35 U.S.C. § 103(a) as 16 unpatentable over Williams is not sustained. 17 18 REVERSED 19 20 vsh

Appeal 2007-4176 Application 09/641,021

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